

CLAIMS

1 Composition for the treatment of bad breath, comprising:

- A carrier material,
- A sulphite oxidase enzyme,
- At least one enzyme capable of breaking down glucose, starch and/or cellulose present in the oral cavity,
- An oxidoreductase enzyme,
- A source of halide or pseudohalide ions,
- A peroxidase enzyme.

2 Composition according to claim 1, wherein the quantity of support material ranges from approximately 1% to approximately 99% by weight of the total weight of the composition.

3 Composition according to claim 1 or claim 2, wherein the quantity of sulphite oxidase ranges from approximately 0.2 IU to approximately 2000 IU.

4 Composition according to one of claims 1 to 3, wherein the enzyme making it possible to break down the starch and/or cellulose present in the oral cavity into glucose is chosen from the group composed of amylase, cellulase, glucoamylase and their mixtures and that the quantity of the aforesaid enzyme varies from approximately 0.05% to approximately 30% by weight compared to the total weight of the composition.

5 Composition according to one of claims 1 to 4, wherein the oxidoreductase enzyme is selected from the group comprising glucose oxidase, galactose oxidase, glycolate oxidase, aldehyde oxidase, lactate oxidase, xanthine oxidase, L-amino-acid oxidase, D-amino-acid oxidase, monophosphate oxidase, hexose oxidase, xylitol oxidase, pyranose oxidase, alcohol oxidase and their mixtures and wherein the quantity of the aforesaid enzyme varies from approximately 0.2 IU to approximately 2000 IU.

6 Composition according to one of claims 1 to 5, wherein the source of halide or pseudohalide ions is selected from the group composed of potassium thiocyanate, sodium thiocyanate, ammonium thiocyanate, other thiocyanate salts, potassium iodide, other iodide salts, sodium chloride, other chloride salts and their mixtures and that the quantity of the aforesaid source of ions varies from approximately 0.0001 mol/g to approximately 0.1 mol/g of carrier material.

7 Composition according to one of claims 1 to 6, wherein the peroxidase is selected from the group composed of lactoperoxidase, superoxide dismutase,

myeloperoxidase, chloroperoxidase, horseradish peroxidase, saliva peroxidase and their mixtures, and that the quantity of the aforesaid enzyme varies from approximately 0.1 IU/g to approximately 100 IU/g of the carrier material.

8 Composition according to one of claims 1 to 7, wherein the composition also includes an agent stimulating salivation, chosen in particular from the group of saturated or unsaturated emulsifiers, acidifiers and their mixtures.

9 Composition according to one of claims 1 to 8, wherein it includes a buffering agent used to obtain a composition with a pH of from approximately 4 to approximately 8, preferably from approximately 5.4 to approximately 6.5.

10 Composition according to one of claims 1 to 9, wherein it contains an antibacterial enzymatic agent selected from the group comprising lysozyme, lactoferrin and their mixtures.

11 Composition according to one of claims 1 to 10, wherein it includes a flavouring agent selected from the group comprising chicken flavours, fish flavours and their mixtures.

12 Composition according to one of claims 1 to 11, wherein it includes suitable vehicles and excipients for oral administration.

13 Composition according to one of claims 1 to 12, wherein it is supplied in a liquid oral form.

14 Composition according to one of claims 1 to 12, wherein it is supplied in a solid oral form.

15 Composition according to one of claims 1 to 14, wherein the composition is presented in the form of toothpaste, chewing strips, chewing gum, mouthwash, oral gel, dental powder, chewing tablet, chewing paste.